PLOWING FOR WATER

Must Be Done Deeply and at the Right Time.

Experiment Stations Find That When Work Is Done in Fall It Proves Water Conserving and Has Many Other Advantages.

It is not alone sufficient to plow and to plow deeply; it is also necessary that the plowing be done at the right time. In the very great majority of cases over the whole dry-farm territory, plowing should be done in the fall. There are three reasons for this; first, after the crop is harvested, the soil should be disturbed immediately, so that it can be exposed to the full action of the weathering agencies, whether the winter be open or closed. If for any reason plowing cannot be done early, it is often advantageous to follow the harvester with a disk, and to plow later when convenient. The chemical effect on the soil resulting from the weathering made possible by fall plowing, as will be shown in chapter IX., is of itself so great as to warrant the teaching of the general practice of fall plowing. Secondly, the early stirring of the soil prevents evaporation of the moisture in the soil during late summer and the fall. Thirdly, in the parts of the dry-farm territory where such precipitation occurs in the fall, winter or early spring, fall plowing permits much of this precipitation to enter the soil and be stored there until needed by plants.

A number of experimental stations have compared plowing done in the early fall with plowing done late in the fall or in the spring, and with almost no exception it has been found that early fall plowing is water-conserving and in other ways advantageous. It was observed on a Utah dry-farm that the fall-plowed land contained to a depth of 10 feet 7.7 acre-inches more water than the adjoining spring-plowed land—a saving of nearly one-half of a year's precipitation. The ground should be plowed in the early fall as soon as possible after the crop is harvested. It should then be left in the rough throughout the winter, so that it may be mellowed and broken down by the elements. The rough land further has a tendency to catch and hold the snow that may be blown by the wind, thus insuring a more even distribution of the water from the melting snow.

A common objection to fall plowing is that the ground is so dry in the fall that it does not plow up well, and that the great dry clods of earth do much to injure the physical condition of the soil. It is very doubtful if such an objection is generally vali[illegible] if the soil is so cropped as [illegible] a fair margin of moisture in [illegible] at harvest time. The atmosph[illegible]ncies will usually break [illegible]he clods, and the physical re[illegible]he treatment will be benef[illegible]n-doubtedly, the fall plowing o[illegible]d is somewhat difficult, but th[illegible]sults more than pay the f[illegible]r his trouble. Late fall plow[illegible] the fall rains have softened [illegible] is preferable to spring plo[illegible] for any reason the farmer f[illegible] he must practice spring plo[illegible] should do it as early as po[illegible] the spring. Of course, it is [illegible] able to plow the soil when [illegible] as to injure its tilth [illegible] soon as that [illegible]d, the plo[illegible] roun[illegible] ther[illegible]

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GREAT DANGERS IN DISKING

Habit Comes From Humid States Where It Rains Often and Little Cultivation Is Needed.

(By E. R. PARSONS.)

We have been watching the effects of shallow plowing and disking for nearly thirty years, and still we can see no good in it. Every dry year the same thing happens. In 1908 we went over thousands of acres where the crops had been disked in on stubble. We saw oats burned out six and eight inches high; spring wheat completely fired just beginning to head; winter wheat that went only five bushels to the acre; and fields of corn on shallow-plowed sod that yielded nothing but a handful of fodder.

The disking and shallow plowing habits come from the humid states, where it rains sometimes twice a week, and small crops can always be raised by simply cultivating enough to keep the weeds out.

Farmers will sometimes say: "We can raise more by disking than plowing." This is true, because a surface farmer seldom plows more than three inches, and he can do this equally well and more quickly with the disk. Or he may plow without harrowing, let the ground dry out as he goes, and plant in a poorly prepared seed bed.

An old friend of ours used to raise indifferent crops by plowing once in three years and disking in his seeds the two intervening years. The first year his oats would be about two to three feet high; the second year, 18 inches; and the third about a foot; but if a dry year happened, there was nothing doing. He always would persist that he could raise good crops without plowing to cary his cattle through the winter. I happened to meet him in 1909. "Well," I said, "how did you come out last year?" "Oh," he said, "I sold my cattle."

Thousands of head of cattle were sold in the fall of 1908 for the same reason. This put the market right down and the dry farmers lost heavily.

Supposing we plant a crop of spring wheat or oats on corn stubble, what happens? Ninety per cent. of the farmers put cattle on the stubble during the winter. The ground becomes hard and overpacked; we disk this on the surface and plant the seed. For awhile it does splendidly, and if the rains keep up will make a fair crop; but if dry weather comes and a crust forms on the surface or under the mulch, the crop is gone, for it is solid underneath. It has never been plowed.

It is the surface farmers who are always wailing about this crust under the mulch, but those who belong to the deep-plowing school pay no attention to it, for they still have plenty of room for the roots of their crops down below, and if the mulch above the crust is in proper shape there is no more evaporation than there is before.

A man wrote to me once and asked what he should do for the crust under the mulch. I wrote back and said: "Next year plow deep." His answer was: "How did you find out that I didn't plow deep?"

The worst consequence of disking without plowing is the effect it has on next year's crop. The ground being hard, the water penetrates very little; the available moisture is used up by the crop, and the surplus evaporates or runs off. Nothing is saved for next year.

In dry farming, if we work only for the present, we are living from hand to mouth. The very foundation of this branch of agriculture is to farm for the future. Store up moisture in the soil next year and the year after, keep track of it with the pick and shovel or with a ground augur, and you will soon find out which style of farming pays the best.

POULTRY YARD AND PEN.

Houses must be kept sanitary and the fowls free from vermin.

Lice are working havoc, and too severe measures cannot be adopted.

It is the even, steady thrift of our stock that makes them pay a profit.

In making an egg ration, do not forget a liberal allowance of sunshine.

The comb not only denotes egg laying, but the general condition of the hen.

Less grain is needed for fowls when bone and vegetables are fed in abundance.

A cold draft will stop hens laying as quickly as anything in the world—sure.

Early hatches do better than those brought off after the heat of the summer has begun.

To make the chick grow, first give plenty of good fresh air; don't allow them to crowd.

Chilled or long-laid eggs will not produce as strong chicks as fresh, well-cared for eggs.

In grading up the chickens, only those that are the most vigorous should be considered.

Turkey raisers find it profitable to have Guinea fowls with the turkey flock. They act as police.

There is only one time when a poultryman is justified in selling a good pullet, and that is when he is going out of business.

The hen is admitted to be one of the greatest financial factors in the country today, and she is also one of the most overworked.

Some good poultrymen think by feeding setting hens in the morning they are more apt to remain contentedly on their nests all day.

A hen that runs to meat may lay steadily for a week in the spring and [illegible] and then go on a vacation [illegible]ance of the year.

WOULD HAVE TO WAIT.

Lady—How much for children's pictures?

Photographer—Three dollars a dozen.

Lady—Why—er—I've only got eight.

ECZEMA DISFIGURED BABY

"Our little boy Gilbert was troubled with eczema when but a few weeks old. His little face was covered with sores even to back of his ears. The poor little fellow suffered very much. The sores began as pimples, his little face was disfigured very much. We hardly knew what he looked like. The face looked like raw meat. We tied little bags of cloth over his hands to prevent him from scratching. He was very restless at night, his little face itched.

"We consulted two doctors at Chicago, where we resided at that time. After trying all the medicine of the two doctors without any result, we read of the Cuticura Remedies, and at once bought Cuticura Soap and Ointment. Following the directions carefully and promptly we saw the result, and after four weeks, the dear child's face was as fine and clean as any little baby's face. Every one who saw Gilbert after using the Cuticura Remedies was surprised. He has a head of hair which is a pride for any boy of his age, three years. We can only recommend the Cuticura Remedies to everybody." (Signed) Mrs. H. Albrecht, Box 883, West Point, Neb., Oct. 26, 1910. Although Cuticura Soap and Ointment are sold by druggists and dealers everywhere, a sample of each, with 32-page book, will be mailed free on application to "Cuticura," Dept. 14 L, Boston.

Baltimore French.

A Baltimore boniface tells of a waiter in that city who lately announced that he had taken up the study of the French language.

"Do you find it necessary here?" asked the patron to whom the man confided this bit of information.

"Not here, sir," explained the waiter, "but I've been offered a steady job in Paris at one of the hotels if I can learn French."

"But Paris is full of French waiters," said the patron. "I'm afraid you're being deceived."

"No, sir," said the man, with much earnestness and absolute simplicity. "The proposition's a straight one. The proprietor of the hotel says that the waiters he has can't understand French as we Baltimoreans speak it, and that's what he wants me for, you see."—Lippincott's.

Wonder What Whistler Said.

Robert Henri, the New York painter, was talking about those millionaires who buy merely to show off, doubtful "old masters" at fabulous prices.

"Their knowledge of art," Mr. Henri said, "is about equal to that of the sausage manufacturer who said to Whistler:

"'What would you charge to do me in oil?'

"'Ten thousand,' answered Whistler, promptly.

"'But suppose I furnish the oil?' said the millionaire."—Exchange.

It Was No Porterhouse.

"How did you find your steak, sir?" inquired the expectant waiter, as he held out his hand to receive a tip.

"Only by dogged perseverance," replied the guest. "The chef hid it under a Brussels sprout to keep it hot."—Youth's Companion.

Important to Mothers

Examine carefully every bottle of CASTORIA, a safe and sure remedy for infants and children, and see that it

Bears the Signature of *Chas. H. Fletcher.*

In Use For Over 30 Years.

Children Cry for Fletcher's Castoria

As a man grows older he sees something in himself every day that is calculated to make him a little less conceited.

TO DRIVE OUT MALARIA AND BUILD UP THE SYSTEM

Take the Old Standard GROVE'S TASTELESS CHILL TONIC. You know what you are taking. The formula is plainly printed on every bottle, showing it is simply Quinine and Iron in a tasteless form, and the most effectual form. For grown people and children, 50 cents.

One pugilist never offers to fight another just for fun.

Don't try to understand a woman and you will succeed.

COSTS LESS THAN 55 CENTS A BUSHEL TO RAISE WHEAT IN CANADA.

A FREQUENT QUESTION ANSWERED.

Western Canada probably suffered less from weather conditions during the year of 1911 than did almost any other portion of the country. Seeding was most successful and the growing conditions up to July were never better. Crops of all kinds showed wonderful growth at that time and were universally good, but there was not the usually excellent ripening weather in August and the effects of this were felt. Many fields that late in July promised 40 and 50 bushels yield of wheat were reduced to 25 and 30 bushels, while some of course gave the full expectancy and others somewhat less. The quality was also lowered. In face of these conditions, it is found that during the months of September and October, the total amount of contract wheat marketed and inspected was about 20 million bushels, which realized a total of 18½ million dollars, the average price for this wheat being 97¾ cents; that below contract for the two months was a little over 15 million bushels, which at an average price of 82¼ cents per bushel realized a little over eleven million dollars, or a grand total for all wheat of 35 million bushels, which realized a total of a little over thirty-one million dollars.

On the first of November, there was in the hands of the farmers of Manitoba, Saskatchewan and Alberta for sale and seed about 130 million bushels of wheat, from which fact some idea may be had of the value of the wheat crop of 1911.

A careful canvass made by the Winnipeg Free Press made of a number of men farming in a large way indicates that even with the extreme expense of harvesting the crop, which has been caused by the bad weather and difficulty in threshing, wheat has been produced and put on the market for less than 55 cts. a bushel. The average freight rate is not over 13 cts. per bushel. This would make the cost of production and freight 68 cts. and would leave the farmer an actual margin on his low-grade wheat of 17½ cts. and for his high-grade wheat of 19½ cts.; and though this is not as large a profit as the farmer has every right to expect, it is a profit not to be despised, and which should leave a very fair amount of money to his credit when all the expenses of the year have been paid, unless the value of low-grade wheat sinks very much below its present level.

Great Scheme.

"Dear me," said Mrs. Housewife, with a deep sigh, "I can't manage to keep a cook a week."

"You should copy me," observed her friend. "Since my husband learned French I can keep one a year."

Mrs. Housewife looked surprised. "I don't see the connection," she said.

"It's simple enough. He now swears at her in French instead of English, it gives him a vent for his temper, some valuable practice—and the cook thinks he's making love to her!"—Satire.

Modern Methods.

Moliere had written many plays to ridicule doctors and medicine. Louis XIV. heard that the author had, however, a doctor at his service since he became famous and well to do, so the king one day called upon Moliere and said to him:

"I have heard, Moliere, that you have a physician. What is he doing to you?"

"Sire," answered the author of the Malade Imaginaire, "we chat together, he writes prescriptions for me, I don't take them, and I am cured!"—Life.

Both Sides.

She—Just look at the trouble money can get you into.

He—Yes, but look at the trouble it can get you out of.

A man has reached the age of discretion when he is willing to admit that other men may have opinions different from his without being fools.

Mrs. Winslow's Soothing Syrup for Children teething, softens the gums, reduces inflammation, allays pain, cures wind colic, 25c a bottle.

A cheerful liar is more entertaining than a gloomy truth teller.

IN THE BARNYARD.

Duck—What did the fortune-teller tell you?

Chicken—Told me I was going to be mixed up in an affair with a dark lady—and warned me to look out for a country looking guy with an ax.

Exact Description.

"My brother has just got a snap of a job."

"What is it?"

"Setting traps."

Tightness across the chest means a cold on the lungs. That's the danger signal. Cure that cold with Hamlins Wizard Oil before it runs into Consumption or Pneumonia.

Pericles wore his hair pretty close to his eyes—but nobody ever called him a low-brow!

W. N. U., Oklahoma City, No. 51–1911.

Awful.

"The cry of Potts when he found the state of his boot was harrowing."

"Why so?"

"Because it was the cry of a lost sole."

A woman who beats the street car company out of a nickel and puts it in the church plate may believe in the eternal fitness of things.

Lewis' Single Binder straight 5c cigar. You pay 10c for cigars not so good.

And one touch of fashion makes a lot of women look like freaks.